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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,051	02/13/2004	Lianrui Chen	56816.1560	3927

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EXAMINER

SMITH, NICHOLAS A

ART UNIT	PAPER NUMBER
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1753

MAIL DATE	DELIVERY MODE
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10/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/777,051

Applicant(s)

CHEN, LIANRUI

Examiner

Nicholas A. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1-5 remain for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (US 3,382,159) in view of Lepsius et al. (US 6,349,857) and as evidenced by Kataoka et al. (US 5,168,671), Yoshizumi et al. (US 6,033,730) and Jonte et al. (US 6,551,722), and in further view of Davidson et al. (US 5,344,494).
4. Reed in view of Lepsius et al. as evidenced by Kataoka et al., Yoshizumi et al. and Jonte et al. is applied to the claims for the same reasons as stated in paragraph(s) 5-8 of the previous office action.
5. In regards to claim(s) 1 amendment "about 50 to 100 m/s," Reed does not explicitly disclose a velocity in that claimed range.
6. Davidson et al. discloses cleaning of surfaces by blasting (abstract). Davidson et al. discloses that blasting parameters, such as blasting pressure can be optimized to obtained desired cleaning of surface (col. 3, line 67 to col. 4, line 7). It would have been obvious to one of ordinary skill in the art to modify Reed in view of Lepsius et al. as evidenced by Kataoka et al., Yoshizumi et al. and Jonte et al.'s method with

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Davidson's et al. optimization of blasting pressure in order to obtain a clean surface (Davidson et al., col. 4, lines 3-7). It would have been obvious to one of ordinary skill in the art to select the claimed range of velocities (which are directly a result of blasting pressure, as evidenced by Kataoka et al. and explained in previous office action, paragraph 5) because Davison et al. teaches that blasting pressure is a results-effective variable (Davidson et al., col. 4, lines 3-7). See MPEP 2144.05 II.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (US 3,382,159) in view of Lepsius et al. (US 6,349,857) and as evidenced by Kataoka et al. (US 5,168,671), Yoshizumi et al. (US 6,033,730) and Jonte et al. (US 6,551,722), and further in view of Davidson et al. as applied to claim 2 above, and further in view of Jonte et al. (US 6,552,722)

8. Reed in view of Lepsius et al. and as evidenced by Kataoka et al., Yoshizumi et al. and Jonte et al., further in view of Davidson et al. and further in view of Jonte et al. is applied to the claims for the same reasons as stated in paragraph(s) 10-11 of the previous office action.

Response to Arguments

9. Applicant's arguments filed 17 July 2007 have been fully considered but they are not persuasive. In regards to Applicant's argument about the velocity of the pellets, please see rejection ground above in paragraphs 5-6. In regards to Applicant's argument pertaining to the size of the pellets used in shotblasting in prior art do not overlap the claimed ranges, please note that Yoshizumi et al. discloses a range of 0.18 mm or more, a range that overlaps both the sizes of the steel and stainless steel pellets

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(Yoshizumi et al., col. 1, lines 45-51). In regards to Applicant's argument that mixing both steel and stainless steel pellets for use as shotblasting materials provides superior results, Applicant has not pointed out any data wherein unexpected results occur from a mixture of common shotblasting materials over the use of either shotblasting material alone.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Benedict et al. (US 6,584,820) pertains to the utility of using combinations of shotblasting materials for producing enhanced surfaces. Brupbacher et al. (US 2003/0049485) discloses the using of stainless steel shot pellets for producing a corrosion control coating.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas A. Smith whose telephone number is (571)-272-8760. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on (571)-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NAS



SUSY TSANG-FOSTER
PRIMARY EXAMINER